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Citation for published version:

Osborne, S & Flemig, S-S 2015, 'Conceptualizing risk and social innovation: An integrated framework for risk governance', *Society and Economy*, vol. 37, no. 2, pp. 165-182. <https://doi.org/10.1556/204.2015.37.2.2>

Digital Object Identifier (DOI):

[10.1556/204.2015.37.2.2](https://doi.org/10.1556/204.2015.37.2.2)

Link:

[Link to publication record in Edinburgh Research Explorer](#)

Document Version:

Peer reviewed version

Published In:

Society and Economy

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CONCEPTUALIZING RISK AND SOCIAL INNOVATION: AN INTEGRATED FRAMEWORK FOR RISK GOVERNANCE

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Abstract

Public policy seeks innovation as a solution to society's big problems, yet it almost always fails to address one key component of innovation: risk. Furthermore, risk management in public policy predominately focuses on the minimization or even avoidance of risk, no matter its nature. This article focuses on the nexus between risk and social innovation specifically in public policy. It acknowledges the special context of decision-making in public policy and proposes two differentiations that are necessary for a holistic model of risk management in public policy innovation: Firstly, the differentiation between cases of risk and uncertainty; and, secondly, between hard and soft risk management approaches. Concluding, the chapter presents a framework that can inform public policy makers and practitioners alike regarding risk management and its effect on social innovation.

Introduction

Innovation is an imperative of public policy: In a time of resource constraint governments, innovation of public services has become a *sine qua non* of keeping up with society's needs. Yet, little attention has been given to its flipside: taking risks. More generally, risk, and how to manage it, has become a central theme of the social sciences (see for instance a collection of social science writing on risk edited by Taylor-Gooby and Zinn, 2006). Firmly rooted in the actuarial sciences and engineering, social science scholars have acknowledged the importance of how risk is perceived, constructed, and managed. This ranges from classical financial risk management to the fields of public health, disaster studies, sociology, social policy, political science, and the health and safety studies (for a good overview, see Taylor-Gooby and Zinn, 2006). In this chapter, we will narrow our focus on the relationship between risk and social innovation in a public policy context.

Innovation and risk taking are inextricably linked. Public policy is no exception in this regard. As Hartley aptly states “[i]nnovation, by definition, is uncertain in both process and outcome” (Hartley, 2013). Tidd and Bessant (2009) estimate that about 45% of innovation projects in the

private sector fail while over 50% exceed their initial budget and/or timeline. Numbers in the public sector are likely to be similar but empirical evidence is rare. Yet, it remains a common notion that the public sector is inherently risk adverse¹ (Jayasuriya, 2004; Patterson et al., 2009), while governments demand increasingly more (risky) innovation (e.g. DIUS, 2008). In the light of Current economic rigors and media scrutiny of any form of public policy (Patterson et al. 2009), an aversion to risk does not seem surprising.

Despite this, even those who claim to acknowledge the connection between risk and social innovation have little to say by ways of how to balance risk and innovation. London-based think tank Nesta (National Endowment for Science, Technology and the Arts), for instance, dedicates a single line to the question of risk in public service innovation, acknowledging that it is – indeed – “important” (Nesta, 2013).

This chapter on the nexus of risk and social innovation in public policy critically reviews the literature as to the current state of knowledge. In the subsequent sections, we introduce two key propositions based on a differentiated treatment of risk: We distinguish between the effects of risk and uncertainty and highlight the role of reputational risk for public policy innovation. Based on these propositions, we suggest a holistic model of risk management and social innovation in public policy contexts.

Defining Risk and Social Innovation

Featuring widely across the academic literature – as well as common parlance – both “risk” and “innovation” are terms with many meanings. This is itself problematic and leads to a lack of definitional clarity. For sociologists, risk is studied as a social construct (e.g. Green, 1997 and 1999; Zinn 2008a and 2008b), while financial management scholars mainly focus on actuarial risks defined in monetary terms (e.g. Andreeva et al., 2014).

Our focus is a public policy context for both scholars and practitioners. In other words, the question is how risk and social innovation in a public policy context differs from other social sciences. For this purpose, we adopt Brown and Osborne’s (2013) preferred definition of innovation as “the intentional introduction and application within a role, group or organization

¹ The UK National Audit Office reports that six in ten public sector managers feared the risk of missing an opportunity to improve service delivery because of a general tendency for risk minimization (UK National Audit Office, 2000: p.5).

of ideas, processes, products or procedures, new to the relevant unit of adoption, designed to significantly benefit the individual, the group organization or wider society” (West and Farr, 1990:3). As such, innovation is not synonymous with any change process. Rather, it is “a distinctive category of discontinuous change that offers special challenges to policymakers and service managers alike” (Brown and Osborne, 2013: 188).

Such innovation in public policy can furthermore be categorized into *evolutionary innovation*, *expansionary innovation*, and *total innovation* (Brown and Osborne, 2013: 198). Evolutionary innovation denotes new skills or capacities that are used to address an existing need; expansionary innovation describes new needs that are being addressed by existing policies, skills or capacities. Finally, total innovation stands for a new need being addressed by a new skills or capacities (Brown and Osborne, 2013: 199). Brown and Osborne stipulate that technocratic risk management provides a framework for evolutionary innovation, while decisionistic risk management can accommodate evolutionary and expansionary innovation. Transparent risk governance, on the other hand, provides the most comprehensive framework that also provides a suitable framework for total innovation.

Furthermore, Brown and Osborne (2013) suggest that risk can be conceptualized on three different levels (“locus of risk”): *consequential risk* at the level of the individual, *organizational risk* on the level of the organization and its staff, and *behavioral risk* at the level of the wider community and environment. This matches Renn’s (2008) differentiation between three approaches to risk: technocratic risk management, decisionistic risk management, and transparent risk governance.

Technocratic risk management is based on the minimization of risk through expert decision-making. Risk, in this view, can be defined objectively and minimized through scientific evidence (Brown and Osborne, 2013: 197). However, Renn points out the shortcomings of technocratic risk management, which are bounded rationality in all human decision-making and the fact that (acceptable) risk is more often socially constructed than it is objectively defined (ibid).

Decisionistic risk management extends technocratic risk management by including into the process the possibility of discourse on the evaluation of identifiable risks. While risk is now vetted in both positive and negative terms, the decision authority in Renn’s decisionistic risk

management is still limited to politicians, excluding a vast number of other stakeholders. This leads to a limited point of view from which risk is being analyzed (Brown and Osborne, 2013: p.195).

Finally, Renn's third approach, transparent risk governance "is the core of a genuine engagement with the nature, perceptions and contested benefits of risk in complex situations" (Brown and Osborne, 2013: p.198). This approach is inclusive of all key stakeholders and transparent in its decision-making, a process that is aided by new Information and Communication Technologies that help to connect stakeholders in public services. Brown and Osborne suggest that this description fits most closely to the risk environment of modern public policy and propose, therefore, that "risk governance, rather than risk minimization or management, is the appropriate framework for understanding and negotiating risk in innovation in public services" (Brown and Osborne, 2013: p.198).

Current Scholarship on Risk and Social Innovation

In this section, we provide an overview of the literature on risk and social innovation in a public policy context. There are five main works relevant to the public policy context, corroborating Brown and Osborne's (2013) findings. These are Harman, 1994; Hood, 2002; Lodge, 2009; Vincent, 1996 and Bhatta (2003). Whereas Harman discusses the negative impact of risk management on public sector accountability, Vincent argues that the public eye is fiercely watchful of public sector activities, leading to increased risk management as a means of avoiding the blame of other officials and the wider public. Along similar lines, Hood introduces the imagery of risk management as a "blame game". Risk management on his account is about avoiding blame and/or attributing it to other parties. Lodge, finally, suggests that different "variations in instruments" (Lodge, 2009: p. 399) are necessary to offer effective risk management in the public sector. He also identifies the obsession with regulation to 'insulate' public policies from risk and advocates a more complex system of risk appraisal that moves beyond Hood's observed "blame game".

Bhatta (2003) also acknowledges the gap in empirical knowledge regarding the relationship between risk and innovation in public policy. In particular, he notes that there is a qualitative difference between the public sector and the private sector as far as risk is concerned – namely the existence of 'wicked problems' and the fact that decisions, even when made under

uncertainty, need to live up to the standards of democratic scrutiny rather than being unilateral ‘executive decisions’² (Bhatta, 2003: p.2). “Wicked problems” (Churchman, 1967) denote problems that are either very difficult or impossible to solve due to a host of factors, such as competing moral values, interdependencies, lack of information, etc. Public services are particularly prone to such wicked problems because allocation choices do not just result in monetary differences, but are attached to public goods, such as health or defense. Moreover, media scrutiny has increased rapidly over the last 50 years, and public service organizations have had to battle numerous scandals of mismanagement and service failure.

This means that success – unlike in the private sector – cannot be judged “on average”: even if the majority of a public organization’s service decisions turn out to be beneficial and successful, there is still little tolerance for any sort of even occasional ‘failure’. This leads to “playing safe” behavior and “incremental pluralistic policy formation that enables the policies to move forward but only marginally at a time” (Bhatta, 2003: p.6). Bhatta concludes that, if innovation in the sense set out in this paper is truly to happen, we must learn more about the factors that influence public service managers’ risk appetite; he suggests different institutional, contextual and political variables that could be explored in this context (Bhatta, 2003: p. 9).

Relaxing our research criteria, we widened our literature review to include a wider scope of scholarship. This led to the inclusion of four additional areas of literature, which we will provide at this stage:

1) Financial Accountability and Risk

As described by Brown and Osborne (2013), risk management in the public sector is usually associated with a technocratic, quantitative assessment of potential financial risk. One stream of this literature associates this financial due-diligence and technocratic risk management with democratic/public accountability. A special issue of *Financial Accountability and Management* (August 2014) dedicated to public sector risk entails two articles that – while not directly addressing innovation – offer interesting insights for the innovation process in public service organisations (PSOs). Palermo (2014) finds that risk managers themselves are a source of innovation in the public sector by defining best practices for their respective service area (p. 337). He also emphasises that key skills for the successful risk manager include communication

² While this is a *de facto* possibility even in democratic systems, there is always a potential loss of reputation and, at worst, votes that looms as a consequence, even if a decision should prove overall beneficial.

and relational abilities. Far from the technocratic approach, Palermo suggests that soft skills and experiential learning evolve new risk management techniques. This experiential communication approach rooted in technocratic financial accountability could apply to all three different types of innovation described by Brown and Osborne (2013). Empirical testing beyond Palermo's case study will be necessary however to show whether such flexible approaches really can accommodate innovation in a more flexible way.

Similarly, Andreeva et al. (2014) argue that risk management all too often results in regulation. Hard guidelines, however, result in a loss of flexibility that can stifle innovation. Regulations also do not address unforeseeable risks; rather, their rigidity often makes it even harder to address previously unanticipated risks. PSOs are thus not necessarily better insulated from risk just because of regulatory standards. Rather, they suggest, "knowledgeable oversight" should be exercised, offering a more flexible approach to risk management, much akin to Palermo's relational communications model. However, the responsibility for the provision and maintenance of public good provision and the balancing of market failures is no longer solely in the hand of governments. Andreeva et al. (2014) find that such "knowledgeable oversight" is exercised by a wider group of stakeholders, including the private and the non-profit sectors. At the same time, this dilution of responsibility also poses important new challenges to accountability for public services.

What both papers demonstrate is that accountability and risk management are inextricably linked in public service provision. For ease of scrutiny and comparison, financial data seem to remain the preferred unit of measurement. Risk management and democratic accountability are thus two sides of one coin. As Bhatta (2003) suggests, creating more capacity for innovation in public services will require a change in the sector's risk aversion and in the context that produces this phenomenon. Introducing new forms of accountability through novel regulatory approaches that move beyond the numbers seem to be one strategy of doing so, at least based on Palermo's case study findings. This also resonates with Renn's (2008) third approach of risk governance.

2) Public-Private Partnerships (PPP) and Private Finance Initiative (PFI)

If risk management is a form of public accountability in the democratic process, and accountability requirements, vice versa, are among the main reasons for public sector risk

aversion, the question arises who is actually accountable for which risk in public service provision. As Andreeva et al. (2014) demonstrate, accountability is spread across different actors that go beyond the public sector. Public-private partnerships (PPPs) (i.e. the contracting out of services to for profit and non-profit organisations) has not only been hailed as a potentially significant source of innovation, it has also become common practice across advanced welfare states (Freshfields Bruckhaus Deriner, 2005).

Evaluating Labour's encouragement of PPPs, Hood and McGarvey (2002) found that Scottish local authorities tended to make inefficient risk allocation choices when it came to PPPs. In particular, they highlighted that there was too little awareness of risk management in collaborations across different sectors. Most importantly, they noted that the inability to manage risk efficiently and effectively was what led PPPs to lag behind commercial operators in terms of value for money and innovation.

Four years later, Hood et al. (2006) also pointed out that PPPs "have been criticised as representing poor value for money" (p.40) and highlighted that a lack of transparency in risk management – on both sides – was inhibiting democratic accountability. Further research will need to show whether this could also apply to the potential to innovate.

In a non-peer reviewed discussion paper, Lewis (2001) also described PPPs as essentially risk-sharing relationships between the public and the private sector, and links the optimal allocation of risk to efficiency and innovation in outcomes. However, Lewis does not describe what such an optimal risk allocation would look like.

One particular form of PPP that is said to promote innovation is the Private Finance Initiative (PFI), however, the evidence is at best ambivalent. The PFI is a special form of PPP that "relates to the provision of capital assets for the public service" following a "highly prescriptive legal framework" (Ball and King, 2006). Based on their review of the literature, Ball and King (2006) argue that risk transfer is key for a PFI to deliver value for money. Data from various assessments (e.g. HM Treasury Task Force, 2000; Commission on Public Private Partnerships, 2001; National Audit Office, 1997 and 2000) however, suggest that risk is inefficiently allocated and outcomes not superior to those provided by the public sector only. On the contrary, PFI projects tended often to lead to negative outcomes, such as higher costs or

severe time delays (Ball and King, for instance, posit that “it might require £1 billion to bring the stock of PFI schools up to standard” in Scotland alone; Ball and King, 2006: 39).

More recently, Ball et al. (2007) concluded that the risk transfer between the public and the private sector is asymmetric in so far as “if things go well [...] the private sector will benefit, but if things turn out badly then the public sector client finds it hard to exact the penalty regime laid down” (Ball et al., 2007: 289). This confirms a similar conclusion previously made by the Commission on Public Private Partnerships (2001). Ball et al. furthermore formulated three policy recommendations. These were that evidence-based risk assessment should be preferred over purely subjective risk assessment (the latter remaining the standard in the public sector), if there were few but crucial risks, then risk transfer should concentrate on these, and that contracts and indicated figures should be seen as *estimates* that require thorough risk assessments in order to fully appreciate their value.

More positively, on the other hand, Corner (2006) used British data to evaluate the PFI and found it ambivalent regarding risk allocation and cost efficiency, but also, as innovation driver. However, this is contingent on efficient risk management. He concluded that the advantage of the PFI had been to shift the risk focus away from a purely financial perspective to decisions about efficient risk allocation in the delivery of services.

Based on Laughlin’s previous work on PFIs, Broadbent et al. (2008) furthermore analyse PFIs in the context of the British National Health Service (NHS). They find that actuarial risk management prevails in PFIs, i.e. the predominant focus on quantitative risk management crowds out more qualitative concerns, such as reputation or social risks. In subsequent project evaluations, PFIs also followed a strict accounting logic in terms of retrospective risk analysis, which led to a narrow emphasis on certain quantitative risks while all qualitative risks were ignored. Broadbent et al (2008) suggest that efficient risk allocation in PFIs must take into account both quantitative as well as qualitative risks in decision-making processes, which can only be achieved if risk management approaches move beyond a strict accounting basis.

Finally, Wall and Connolly (2009) build on Broadbent and Laughlin (1999) previous analysis of the performance of PFIs in the UK. They acknowledge that previous appraisals of PFIs have been largely negative, but instead point to a slow, but steady learning curve. For instance, they find that a similar level of public service infrastructure investment would not have been possible

without the PFI. At the same time, Wall and Connolly caution that the transfer of risk will always entail one stronger and one weaker contracting partner. They welcome further developments in the refinement of PFI structures and contracts.

3) Economics Literature on Risk

The economics literature on risk offers further insights on the contextual factors that link uncertainty and risk to innovation (e.g. Varian, 1992; Mack, 1971; Kahneman and Tversky, 1979). Mack juxtaposes how risk and uncertainty can affect innovative alternatives in public services. She suggests that PSOs may use uncertainty as a tool to deselect innovative alternatives, although their “net utility (...) could be expected to be greater than that of the tried and true” (Mack, 1971: p. 5). The more uncertainty is attached to a particular option, the more likely it is to be discarded, uncertainty weighing as a criterion against its expected benefits. However, uncertainty can also work in favour of innovation. Mack suggests that uncertainty can provide some “leeway for a rearrangement of fact and emphasis” (p.7). In other words, uncertainty may mask potential risks or potentially undesirable outcomes that are associated with a particular innovative option, which enables its proponents to enact it. Uncertainty of results is thus a contextual variable, and may work as a barrier or a driver of innovation at the same time.

On risk, Mack also emphasises the importance of context. As long as a potential risk is known and considered manageable, it is not necessarily a barrier to innovation. However, other contextual factors, such as political accountability, may deter PSOs from choosing innovative service options that are associated with risks deemed unacceptable or inopportune, even if they are manageable. Renn’s (2008) discussion of the social construction of risk provides further evidence for Mack’s point.

4) Practitioner’s Guides

Treating more specific scenarios and/or audiences, think tanks and international organisations have been publishing practitioner’s guides on managing risk and innovation. However, their usefulness for extrapolating wider best practice findings is limited in scope.

Brown and Osborne (2013) refer to guides published by think tanks, such as the National Endowment for Science Technology and the Arts (NESTA) and the Young Foundation (NESTA/Young Foundation, 2008). The UK government has furthermore issued broad guidance (Brown and Osborne (2013) cite HM Treasury, 2004; NAO, 2000 and 2001; the Audit Commission, 2007; and the UK White Paper “Innovation Nation, DIUS, 2008). None of these publications, however, offers concrete policy recommendations or a conceptual nexus of innovation and risk beyond the acknowledgment that the two are related.

In a British context, Michael Power (2004) discusses “The Risk Management or Everything” for London-based think tank Demos. Arguing that risk pervades every decision but is particularly relevant for the public sector since it aggregates responsibility for its citizens, Power also points to the “moral economy” of risk (p. 60). He concludes that, while more attention to risk has led to overall better decision-making in government, what needs to be addressed is the sector’s occupation with reputational risk management over quality. This, so he concludes, prevents important innovation in public services (p.60).

There is also a dedicated membership organisation for risk management professionals in the public sector and in public services, ALARM. Its goal is to provide a pool of shared knowledge focused on making “a positive contribution to loss reduction in the Public Sector” (ALARM website). This mission statement highlights the organisation’s understanding of risk management in what Renn (2008) denotes as technocratic risk management with a narrow emphasis on the minimisation of financial risk.

Similarly, the CCAF addresses a North American audience and suggests that innovation and risk management do not necessarily have to cancel each other out as long as formal rules are minimised and regularly reviewed for their continued relevance. This is referred to as “tailored rules” and confirms the importance of flexibility mentioned by previous strands of the theoretical literature.

The World Bank published a discussion paper on “Innovations and Risk Taking” (Campbell 1997) in the context of local government in Latin American and the Caribbean. While the content is very much geared towards the context of Latin America and emerging democracies, the report concludes that decentralising decision-making and the spread of responsibility across different levels of government – with a preference for bringing the responsibility of services to

the lowest possible level of government – can spur innovation on a local level. This insight may be of value for public services, however, further research is required to assess the applicability of Campbell's (1997) findings for PSOs.

The aforementioned practitioner's guides provide, in certain cases, some empirical evidence that can help us understand how different approaches to risk management affect innovation in PSOs. Some echo findings from the more theoretical research literature presented beforehand. For instance, Campbell's (1997) policy recommendation for the spread of responsibility for risk management to all levels of a PSO confirms the gist of Palermo's (2014) decentralised communication model. ALARM and the CCAF firmly stand in the more traditional fields of the actuarial risk and health and safety literatures and do not engage with the concept of innovative behaviour as a separate goal of risk management. Power's (2004) "moral economy" and its effects on risk management take up Renn's (2008) concept of socially constructed risk. It also reinforces Hood's (2012) "blame game" approach, emphasising that risk management may be a political exercise for PSOs in which reputational risk is a constant factor in the delivery of public services.

Literature Review: Conclusion

Including these additional strands of literature into our consideration of risk and social innovation in public policy has highlighted some further leads: The financial risk management literature has considerably widened beyond a technocratic risk management approach, now including soft factors, such as communication structures (Palermo, 2014) or the division of responsibility for risk management (Andreeva et al. (2014)). Empirical evidence on PPPs has been mixed at best, with PFIs in particular being criticised for their inefficient allocation of risk and their effect on obstructing rather than spurring innovation in public services, at least outside of Australia (e.g. McGarvey, 2004, Ball et al. (2010)). Moreover, PSOs do not seem to be intrinsically more risk averse than the private industry (Bozeman and Kingsley (1998)), although Hood and Rothstein (2008) caution that media scrutiny and political accountability are strongest for PSOs, affecting their approach to risk management. This is also confirmed by Hartley (2013), and further developed by Hood (2012) in his work on "blame game" strategies, evidence for which has been found in the field of medical professionals regulation by Flemig (2015). The economic literature and its differentiated assessment of the sometimes counteracting effects of risk and uncertainty on innovative behaviour in PSOs further

emphasises that importance of differentiating between the two concepts. Finally, practitioner's guides provide some empirical support for the theoretical findings, be it in a Latin American (Campbell, 1997), British (ALARM, Power, 2004) or North American (CCAF) context.

Let us return to our initial question: What distinguishes risk and social innovation in the context of public policy from other social sciences? The aforementioned literature suggests two main factors: reputation and accountability. As Hood's blame game illustrates, public accountability among different policy makers increases the importance of reputation, trying to minimize blame and to maximize praise. In addition to more traditional forms of risk, such as financial/actuarial risks and health and safety risks, there is thus a strong *reputational risk* element in public policy making that we will focus on in the following section.

Reputational Risk, Public Accountability and Social Innovation

Because of the importance of reputational risk and public accountability, innovation in the public policy context requires a framework of risk management that goes beyond the traditional models. In this section, we explore the underlying assumptions that shape such a framework. Does the public policy context differ from e.g. innovation in the private sector? And if so, how? Most importantly, how can we address reputational risk?

Firstly, there is an assumption that risk aversion dominates the public sector (Borins, 2014). However, there is more to the story. Bozeman and Kingsley (1998), for instance, challenge this assumption. Their study finds "very little evidence of the *incidence* of risk aversion or that the incidence is greater in the public than in the private sector" (p.116). Instead, they identify three factors as indicative of the risk approach taken by *any* organization: 1) the more trust employees feel they have from their superiors, the more calculated risks they are willing to take; 2) clarity of goals also leads to a more open risk approach; and 3) the more formalism and red tape, the more risk averse an organization's culture. Thus, factors such as size and management style seem to be more indicative of an organization's risk management approach than the differentiation between public and private sectors. Hartley (2013) confirms this by comparing public and private features of innovation, indicating that an organization's size and maturity in particular may account for differences in innovation behavior.

Secondly, the literature links reputational risk and the need for accountability in public policy innovation to transparency. Hartley (2013) points out that the public sector can learn from the private sector as regards decision-making processes. For instance, she suggests that public sector organizations adapt traditional management tools, such as constructive challenge meetings or competitor analysis (Hartley, 2013: 53). Hartley however notes that accountability markedly differs from the private to the public sector. The democratic values on which public policies are based demand a high degree of transparency at all stages of innovation. As Hartley describes this scrutiny, public policy is made “the full glare of media publicity” (p. 54).

This ties in with Hood’s aforementioned model of the blame game, which dominates the public policy literature on risk and its possible nexus to innovation. As described beforehand, the blame game affects risk management at all stages of the policy process. Because public scrutiny and the potential cost of being associated with a failure are high, there is an incentive for those in decision-making powers (on an individual and organizational level) to shift risks to other stakeholders within their policy network.

Hood and Rothstein (2000) further elaborate that reputational risk is associated with risks to third parties and to the service providers themselves (p.1). Therefore, they criticize the one-size-fits-all approach that has been adopted across the public sector. Like the private sector, Hood and Rothstein argue, public policy makers need to adapt their risk management strategies to the specific type of risk and point in the policy process in order to reach similar levels of innovation and efficiency. In their view, this can be achieved through a systemic approach to risk management, based on open and extensive deliberation and communication *across* and not just within policy domains.

Feller’s (1981) concept of “public-sector innovation as ‘conspicuous production’” aligns with both Hartley’s and Hood’s findings. He argues that the qualitative context of public policy requires policy makers to use innovation as a proxy measure of actual performance. Innovation thus becomes “conspicuous production”, with blame or praise attributed to failing or successful innovators. Given the negative cost associated with failure, individual public policy makers therefore often require an additional incentive to innovate such as reward schemes, for instance innovation prizes (e.g. Borins, 2014 in the context of the USA).

Two Propositions

Based on the insights from the previous sections, we now introduce two propositions that will help us formulate a specific public policy framework for risk and social innovation. This model will be discussed in the final section.

Proposition 1: Risk management approaches should differentiation between risk and uncertainty and their potential effects on innovation.

There is a difference between the effects of risk in the classical sense, i.e. potential risks that are known *a priori*, and uncertainty, i.e. unquantifiable risk that can only be recognized *a posteriori* (for a thorough treatment of risk and uncertainty, see Mack, 1971). As mentioned in the previous section, these two types of risk are likely to have different, and probably even conflicting, influences on social innovation. Therefore, we propose that they require different risk management approaches when it comes to spurring innovation in public policy. The underlying reasoning is as follows: Known risks can be assumed to drive innovation in so far as they provide the opportunity to find new ways of harnessing these known risks (e.g. new waste management techniques in environmental sustainability, new medication in mental health treatment, etc.). Thus, known risks most likely spur expansionary innovation.

At the same time, these known risks may also be barriers to innovation, namely through regulatory and contracting specifications they invite. Statutory bodies initially bear responsibility for all service risks that they then selectively transfer to service providers if necessary. Quantifiable risks are often addressed through extensive regulation and other attempts to make control and minimize risk. In service contracts, this is likely to lead to a decreased potential for innovation – innovation may be ‘in breach of contract’ although it may bring a net benefit for all parties involved.

Uncertainty, on the other hand, can spur innovation by ways of sudden shocks. Since uncertainty is unquantifiable and cannot be known *ex ante*, the innovation it can potentially spur is likely to be of spontaneous nature and not planned. At the same time, as findings from the private sector suggest, environments and organizations that are prone to high levels of uncertainty will be perceived as “riskier” overall and there may be a decreased willingness for innovation or in fact any change that deviates from the status quo (Bozeman and Kingsley,

1998; Mack, 1971). In this case, the approaches described by Palermo (2014) and Andreeva et al. (2014) on informal and more extensive communication networks across the entire organization provide strategies for PSOs to manage uncertainty. Uncertainty can thus only be managed through an organizational culture open to constant change. Innovation spurred by uncertainty is therefore likely to be total, encompassing new skills and new needs to be addressed. This follows the reasoning of Peters (1989), who suggested that organizations will need to proactively manage chaos (similarly defined as uncertainty) and channel its driver for constant innovation in order to succeed.

Proposition 2: Risk management needs to consciously differentiate between “hard” and “soft” approaches to risk management in order to spur social innovation in public policy.

The main risk management tool in public policy described in the aforementioned literature is regulation at a high level (especially Hood, 2002). Risk management thus follows a top-down direction. We suggest that tools, such as regulation and rules, can be summarized as “hard” risk management. It encompasses technocratic and rule/regulation-driven risk management set at a higher policy-level. Standards of behavior are set and guide actions at the implementing organizations. This provides a higher level of standardization in how risks are managed, but also leaves little to no room for personal decisions and risk evaluations at implementation level.

In contrast, “soft” risk management tools refer to Renn’s (2008) risk governance approaches, based on communication and the adaptation of organizational culture that are also recommended by other authors (Bozeman and Kingsley, 1998; Hood and Rothstein, 2000; Hood, 2002; Andreeva et al., 2014). Here, risk management decisions are delegated to the lowest possible level, such as line-managers of sometimes even frontline staff with regular communication on an individual and team basis. An example is social care, where assessments regarding suitability of service users for home care are conducted by frontline social workers. Guidelines are set on a decentralized level, although they may follow a broader national policy standard, which is monitored by a regulator or auditor. The goal of soft risk management tools is to create a pervasive culture of risk governance, in which individuals have a joint responsibility for finding the appropriate measure to address any particular risk. This can result in autonomous evaluations that are tailored to individual scenarios. This creates an opportunity to formulate and adopt social innovation. However, the necessary dilution of direct

responsibility can also mean that individuals may play the “blame game” at a lower level. Table 1.1 summarizes this proposition.

<TABLE X.1 HERE>

Conclusion: A Public Policy Framework for Risk and Social Innovation

Policy-makers never face only one type of risk in isolation. Rather, they must address risk and uncertainty constantly and simultaneously. For instance, there may be known risks for service users in care homes, such as their frailty and specific patient history. At the same time, there may be uncertainty about future funding for a new service, such as the cooperation between a care home with a primary school in the form of a befriending initiative.

The holistic framework we propose in Table X.2 points to the most appropriate risk management approaches given a known risk or an uncertain situation. It also provides an insight on the kind of innovation that is most likely to succeed given the particular combination of risk type and risk management approach.

<TABLE X.2 HERE>

Hard risk management tools are best suited to manage known risks and provide the possibility for evolutionary innovation. Given the managerial focus, these risk management tools are more suited for top-down innovation as their structural framework is too rigid for grass-root innovation. This is not necessarily negative: the regulation of the medical and healthcare professions, for instance, requires governmentally set guidelines for quality standards (e.g. Flemig, 2015). Innovation in these fields consequently follows the same top-down mechanisms. When applied to uncertainty, however, hard risk management tools are likely to stifle social innovation. Since uncertainty cannot be specified *a priori*, hard risk management approaches are, as Mack (1971) argued, likely to deter policy makers from adopting innovative alternatives in favor of traditional options, such as top-down regulations.

For known risks, this may mean that risk management at lower levels of the organization, i.e. the frontline staff and their immediate managers, may be more appropriate, as long as a minimal framework of standards is set. Both innovation and risk management are bottom-up in this case: With the power to address risk more fully at this grass-root stage, frontline staff can react more directly to new service user needs. Thus, soft risk management approaches are likely to result in expansionary innovation in the case of known risks. However, as Andreeva et al. (2014) caution, this diffusion of responsibility may also backfire and lead to a “blame game” when it comes to public accountability for the implementation of a policy (Hood, 2002).

Finally, soft risk management approaches are suggested to manage uncertainty, leading to an organizational culture that “thrives on chaos” (Peters, 1989) and invites total innovation. This is dependent on a successful system of communication and joint decision-making across the implementing organization (Palermo, 2014).

Thus, efficient risk governance in public policy that encourages social innovation is multifaceted and highly complex. It requires regulatory foresight and a shift in both policy and organizational culture – risk should no longer be seen from a strict actuarial, technocratic point of view that seeks to minimize it at all cost. Rather, risk should be actively considered as variable in social innovation. Individual incentives should be adjusted accordingly to foster a climate of innovation among policy-makers and implementing staff. Frequent and extensive inter- and intra-organizational communication and a diversification of responsibility emerge as the best tools in addressing public policy risks, in particular when it comes to reputational risks.

References

ALARM – The Public Risk Management Association website, accessed on 06 January 2015 at <http://www.alarm-uk.org/>.

Andreeva et al. Governance and Accountability of Public Risk. *Financial Accountability and Management*, 30(3), (2014): 342-361.

- Audit Commission. *Seeing the Light. Innovation in Local Public Services*. (London: Audit Commission, 2007).
- Ball, R. and King, D.N. The Private Finance Initiative in Local Government. *Economic Affairs*, 26 (1), (2006): 36-40.
- Ball, R., Heafey, M., and King, D. The Private Finance Initiative in the UK. *Public Management Review*, 9(2), (2007): 289-310.
- Bhatta. G. "Don't Just Do Something, Stand There!" Revisiting the Issue of Risks in Innovation in the Public Sector. *The Innovation Journal: The Public Sector Innovation Journal*, 8(2), (2003): Article 3, available online at http://www.innovation.cc/scholarly-style/8_2_3_bhatta_innovate-risk.pdf.
- Borins, S. *The Persistence of Innovation in Government*. (Brookings 2014)
- Bozeman, B. and Kingsley, G. Risk Culture in Public and Private Organizations. *Public Administration Review*, 58(2), (1998): 109-118.
- Broadbent, J. and Laughlin, R. The Private Finance Initiative: Clarification of a Future Research Agenda. *Financial Accountability and Management*, 15(3), (1999): 95-114.
- Broadbent, J. and Laughling, R. Public private partnerships: An introduction. *Accounting, Auditing & Accountability Journal*. 16(3), (2008): 332-341.
- Brown, L. and Osborne, S.P. Risk and Innovation. *Public Management Review*, 15(2), (2013): 186-208.
- Campbell, T. *Innovations and risk taking: The engine of reform in local government in Latin America and the Caribbean*. (World Bank Discussion Paper, 1997).

CCAF-FCVI. *Innovation, Risk and Control – A public sector guide to encouraging innovation, understanding control, managing risk, reducing red tape... and delivering better results for citizens*. Internal Publication (CCAF, 2010).

Churchman, C.W. Wicked Problems. *Management Science*, 14(4), (1967): B141–B142.

Commission on Public Private Partnerships. *Building Better Partnerships: the final report of the Commission on Public Private Partnerships* (London: Institute for Public Policy Research 2001).

Corner, D. The United Kingdom Private Finance Initiative: The Challenge of Allocating Risk. *OECD Journal of Budgeting*, 5(3), (2006): 37-55.

Department for Innovation, Universities and Skills [DIUS]. *Innovation Nation*. (London: HMSO 2008).

Feller, I. Public-Sector Innovation as “Conspicuous Production”. *Policy Analysis*, 7(1), (1981): 1-20.

Flemig, S.S. A Game of Responsibility? The Regulation of Health and Social Care Professionals. *Public Money and Management*, 35 (2), (2015): 169-170.

Freshfields Bruckhaus Deringer and United Nations Environment Programme Finance Initiative (UNEP FI). A legal framework for the integration of environmental, social and governance issues into institutional investment. *Asset Management Working Group Report*. (UNEP FI 2005).

Green, J. Risk and the construction of social identity: children’s talk about accidents. *Sociology of Health & Illness*, 19(4), (1997): 457-479.

Green, J. From Accidents to Risk: Public Health and Preventable Injury. *Health, Risk and Society*, 1, (1999): 25-39.

- Harman, E. Accountability and Challenges for Australian Governments. *Australian Journal of Political Science*, 29, (1994).
- Hartley, J. Public and Private Features of Innovation, in Osborne, S.P. and Brown, L. *Handbook of Innovation in Public Services*. (Edward Elgar 2013).
- HM Treasury. *The Risk Programme. Improving Government's Risk Handling. Final Report to the Prime Minister*. (London: HM Treasury, 2004).
- Hood, C. The Risk Game and the Blame Game. *Government and Opposition*, 37(1), (2002): 15-37.
- Hood, C. and Rothstein, H. *Business Risk Management in Government: Pitfalls and Possibilities*. (London: National Audit Office: 2000).
- Hood, J. and McGarvey, N. Managing the risks of public - private partnerships in Scottish local government. *Policy Studies*, 23(1), (2002): 21-35.
- Hood, J., Fraser, I. and McGarvey, N. Transparency of Risk and Reward in U.K. Public-Private Partnerships. *Public Budgeting & Finance*. 26(4), (2006): 40-58.
- Jayasuriya, K. The New Regulatory State and Relational Capital. *Policy and Politics*, 32(4), (2004): 487-501.
- Kahneman, D. and Tversky, A. *Prospect Theory: An Analysis of Decision under Risk* *Econometrica*, 47(2), (1979): 263-292.
- Lewis, M.K. Risk Management in Public Private Partnerships. Centre for Globalisation and Europeanisation of the Economy (CeGe) research paper (Georg-August-University Göttingen, 2001).
- Lodge, M. The Public Management of Risk: The Case for Deliberating among Worldviews. *Review of Policy Research*, (26(4), (2009).

- Mack, R.P. *Planning on Uncertainty: Decision Making in Business and Government Administration*. (Wiley Interscience 1971).
- National Audit Office [NAO]. *Supporting Innovation: Managing Risk in Government Departments*. (London: Stationary Office, 2000).
- National Audit Office [NAO]. *Innovation in PFO Financing. The Treasury Building Project*. (London: Stationary Office, 2001).
- National Endowment for Science, Technology and the Arts [Nesta]/Young Foundation. *Social Innovation*. (London: 2013).
- Palermo, T. Accountability and Expertise in Public Sector Risk Management: A Case Study. *Financial Accountability and Management*, 30(3), (2014): 322-341.
- Patterson, E. et al., Everyday Innovation. *How to Enhance Innovative Working in Employees and Organizations*. (London: Nesta 2009).
- Peters, T.J. *Thriving on Chaos: Handbook for a Management Revolution*. (Pan 1989).
- Power, M. *The risk management of everything: rethinking the politics of uncertainty*. (Demos, London, UK, 2004).
- Renn, O. *Risk Governance: Coping with Uncertainty in a Complex World*. (London:Earthscan 2008)
- Taylor-Gooby, P. and Zinn, J.O. *Risk in Social Science*. (Oxford University Press: 2006).
- Tidd, J. and Bessant, J. *Managing Innovation. 4th edition*. (Wiley 2009).
- Varian, H.R. *Microeconomic Analysis*. (W. W. Norton & Co.; International 2nd revised edition 1984).

Vincent, J. Managing Risk in Public Services: A Review of the International Literature.
International Journal of Public Sector Management, 7(3), (1996): 57-64.

Wall, A.P. and Connolly, C. The Private Finance Initiative: An Evolving Research Agenda.
Public Management Review, 11(5): 707-724.

West, M.A. and Farr J.L (eds.) *Innovation and Creativity at Work: Psychological and Organizational Strategies*. (Chichester: Wiley 1990).

Zinn, J.O. *Social Theories of Risk and Uncertainty*. (Blackwell Publishing 2008a).

Zinn, J.O. Heading into the Unknown: Everyday Strategies for Managing Risk and Uncertainty.
Health, Risk & Society, 10(5) (2008b): 439-450.